



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Science and Ecosystem Support Division
980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 16-0511

Project: 16-0511, Falls of the Neuse Reservoir - Reported by Sue Dye

September 23, 2016

4SESD-EAB

MEMORANDUM

SUBJECT: FINAL Analytical Report
Project: 16-0511, Falls of the Neuse Reservoir
Surface Water Protection

FROM: Sue Dye
EAB Analyst

THRU: Stacey Box, Chief
EAB Water Quality Section

TO: Sue Dye

Attached are the final results for the analytical groups listed below. These analyses were performed in accordance with the Ecological Assessment Branch's (EAB) Laboratory Operations and Quality Assurance Manual (EAB LOQAM). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Data has been verified based on the EAB LOQAM specifications and may have been qualified if the applicable quality control criteria were not met. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Algal Assay (ALG)

AGPT- Maximum Standing Crop (Dry Weight)

SM 8111 (Water)



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Sample Disposal Policy

Because of the laboratory's limited space for long term sample storage, our policy is to dispose of samples on a periodic schedule. Please note that within 60 days of this memo, the original samples and all sample extracts and/or sample digestates will be disposed of in accordance with applicable regulations. The 60-day sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time if you have a special project need. If you wish for the laboratory to hold samples beyond the 60-day period, please contact our Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov, and provide a reason for holding samples beyond 60 days



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SAMPLES INCLUDED IN THIS REPORT

Project: 16-0511, Falls of the Neuse Reservoir

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
1	E163304-01	Surface Water	8/9/16 01:45	8/10/16 10:20
2	E163304-02	Surface Water	8/9/16 01:45	8/10/16 10:20



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DATA QUALIFIER DEFINITIONS

None

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO The test, if analyzed after June 26, 2012, is accredited under the EPA Region 4 ASB's ISO/IEC 17025 accreditation issued by ANSI-ASQ National Accreditation Board/ACLASS. Refer to certificate and scope of accreditation AT-1691.

NR The EPA Region 4 Laboratory has not requested accreditation for this test.



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Algal Assay

Project: 16-0511, Falls of the Neuse Reservoir

Sample ID: 1

Lab ID: E163304-01

Station ID: NEV018C

Matrix: Surface Water

Date Collected: 8/9/16 1:45

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MDL MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
R4-1086	AGPT- Maximum Standing Crop (Dry Weight)	2.0		mg/L	0.10	8/12/16	8/26/16	SM 8111
R4-1087	Limiting Nutrient: Nitrogen					8/12/16	8/26/16	SM 8111



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Algal Assay

Project: 16-0511, Falls of the Neuse Reservoir

Sample ID: 2

Lab ID: E163304-02

Station ID: NEV019P

Matrix: Surface Water

Date Collected: 8/9/16 1:45

<i>CAS Number</i>	<i>Analyte</i>	<i>Results</i>	<i>Qualifiers</i>	<i>Units</i>	<i>MDL MRL</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Method</i>
R4-1086	AGPT- Maximum Standing Crop (Dry Weight)	0.19		mg/L	0.10	8/12/16	8/26/16	SM 8111
R4-1087	Limiting Nutrient: Nitrogen					8/12/16	8/26/16	SM 8111



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Algal Assay (ALG) - Quality Control

US-EPA, Region 4, SESD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1608071 - A 8111 AGPT

Duplicate (1608071-DUP1)

Source: E163304-02

Prepared: 08/12/16 Analyzed: 08/26/16

SM 8111

AGPT- Maximum Standing Crop (Dry Weight)	0.2400	0.10	mg/L		0.1900			23.3	20	CR
Limiting Nutrient	Not Determined		"		Nitrogen				200	

Reference (1608071-SRM1)

Prepared: 08/12/16 Analyzed: 08/26/16

SM 8111

AGPT- Maximum Standing Crop (Dry Weight)	10.28		mg/L	10.200		101	90-110			
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Reference (1608071-SRM2)

Prepared: 08/12/16 Analyzed: 08/26/16

SM 8111

AGPT- Maximum Standing Crop (Dry Weight)	983100		mg/L	994000		98.9	90-110			
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Notes and Definitions for QC Samples

CR Duplicate not significantly different according to test tolerance limits for low concentration samples.